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## REILLY TAR & CHEMICAL CORPORATION

MR. C. F. LESHER - INDIANAPOLIS

St. Louis Park

H. L. Finch

Sept. 8, 1965 (Dictated Sept. 7, 1965)

STILL MAINTENANCE - ST. LOUIS PARS



Thursday, September 2, a leak occurred in No. 16 Still and this still was left cool over the Labor Day weekend, to be repaired today, September 7.

The leak was found to be in the taper from the 16 inch fire chamber to the 10 inch exhaust portion of the tube. As we have reported before on No. 14 Still, this is apparently the weakest portion of thetube. As it was mentioned, we have rather an abrupt taper from the 16 to the 10 inch portion of the tube and you explained that on future design of the tubes you were going to have much more gradual taper.

A noticeable thinning of the metal in the abrupt taper of the tube was noticed at this time. The crack was approximately 1/4 inch wide at the widest point and extended approximately one-fourth of the way around the circumference of the tube. The tube actually had an indentation or cup where the crack occurred. It was felt that this indicated that the tube was exceptionally hot in this portion and sagged upon contraction. The metal was thick enough to readily support a weld and, therefore, it is felt that the tube might go quite a while yet without experiencing undue difficulty.

Our plan is to fire the still, September 8, and we are hoping that the weld will hold and prove satisfactory. It might well be that within the next year we will have to replace at least the exhaust portion of the tube. I know you have mentioned before that tubes have been replaced at other plants when we fail to recall the length of service that can be expected.

Yours very truly,

HLF/ep

co: Dr. F. J. Moots

H. L. Pinch

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